Rui-Qing Hou

List of Publications by Year
in descending order

22 papers	933 citations	516710 16 h-index	677142 22 g-index
22 all docs	22 docs citations	22 times ranked	907 citing authors

#	Article	IF	Citations
1	Magnesium degradation under physiological conditions â€" Best practice. Bioactive Materials, 2018, 3, 174-185.	15.6	177
2	EIS analysis on chloride-induced corrosion behavior of reinforcement steel in simulated carbonated concrete pore solutions. Journal of Electroanalytical Chemistry, 2013, 688, 275-281.	3.8	148
3	In vitro evaluation of the ZX11 magnesium alloy as potential bone plate: Degradability and mechanical integrity. Acta Biomaterialia, 2019, 97, 608-622.	8.3	86
4	Recent progress on coatings of biomedical magnesium alloy. Smart Materials in Medicine, 2022, 3, 104-116.	6.7	75
5	Microstructural influence on corrosion behavior of MgZnGe alloy in NaCl solution. Journal of Alloys and Compounds, 2019, 783, 179-192.	5.5	61
6	Different effects of single protein vs. protein mixtures on magnesium degradation under cell culture conditions. Acta Biomaterialia, 2019, 98, 256-268.	8.3	51
7	Exploring the effects of organic molecules on the degradation of magnesium under cell culture conditions. Corrosion Science, 2018, 132, 35-45.	6.6	42
8	Insight into the anti-corrosion performance of electrodeposited silane/nano-CeO2 film on carbon steel. Surface and Coatings Technology, 2017, 326, 183-191.	4.8	33
9	Adsorption of Proteins on Degradable Magnesiumâ€"Which Factors are Relevant?. ACS Applied Materials & Interfaces, 2018, 10, 42175-42185.	8.0	33
10	A robust calcium carbonate (CaCO3) coating on biomedical MgZnCa alloy for promising corrosion protection. Corrosion Science, 2022, 198, 110124.	6.6	29
11	The stress corrosion cracking behaviour of biomedical Mg-1Zn alloy in synthetic or natural biological media. Corrosion Science, 2020, 175, 108876.	6.6	27
12	Improved biocompatibility and degradation behavior of biodegradable Zn-1Mg by grafting zwitterionic phosphorylcholine chitosan (PCCs) coating on silane pre-modified surface. Applied Surface Science, 2020, 527, 146914.	6.1	27
13	Localized Corrosion of Binary Mgâ€"Ca Alloy in 0.9Âwt% Sodium Chloride Solution. Acta Metallurgica Sinica (English Letters), 2016, 29, 46-57.	2.9	23
14	Investigation and application of mussel adhesive protein nanocomposite film-forming inhibitor for reinforced concrete engineering. Corrosion Science, 2019, 153, 333-340.	6.6	22
15	Controllable degradation of medical magnesium by electrodeposited composite films of mussel adhesive protein (Mefp-1) and chitosan. Journal of Colloid and Interface Science, 2016, 478, 246-255.	9.4	18
16	Influence of Zirconium (Zr) on the microstructure, mechanical properties and corrosion behavior of biodegradable zinc-magnesium alloys. Journal of Alloys and Compounds, 2020, 840, 155792.	5.5	18
17	A comprehensive comparison of the corrosion performance, fatigue behavior and mechanical properties of micro-alloyed MgZnCa and MgZnGe alloys. Materials and Design, 2020, 185, 108285.	7.0	17
18	Corrosion inhibition of pre-formed mussel adhesive protein (Mefp-1) film to magnesium alloy. Corrosion Science, 2020, 164, 108309.	6.6	15

#	Article	IF	Citations
19	Tailoring of Biodegradable Magnesium Alloy Surface with Schiff Base Coating via Electrostatic Spraying for Better Corrosion Resistance. Metals, 2022, 12, 471.	2.3	10
20	Proteins and medium-flow conditions: how they influence the degradation of magnesium. Surface Innovations, 2020, 8, 224-233.	2.3	8
21	Effects of proteins on magnesium degradation - static vs. dynamic conditions. Journal of Magnesium and Alloys, 2023, 11, 1332-1342.	11.9	7
22	Heating-Induced Enhancement of Corrosion Protection of Carbon Steel by a Nanocomposite Film Containing Mussel Adhesive Protein. Journal of the Electrochemical Society, 2017, 164, C188-C193.	2.9	6